#### § 63.1011

# §63.1011 Pressure relief devices in gas and vapor service standards.

- (a) Compliance schedule. The owner or operator shall comply with this section no later than the compliance dates specified in the referencing subpart.
- (b) Compliance standard. Except during pressure releases as provided for in paragraph (c) of this section, each pressure relief device in gas or vapor service shall be operated with an instrument reading of less than 500 parts per million as measured by the method specified in §63.1004(c).
- (c) Pressure relief requirements. (1) After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 parts per million, as soon as practical, but no later than 5 calendar days after each pressure release, except as provided in paragraph (d) of this section.
- (2) The pressure relief device shall be monitored no later than five calendar days after the pressure release and being returned to regulated material service to confirm the condition indicated by an instrument reading of less than 500 parts per million, as measured by the method specified in §63.1004(c).
- (3) The owner or operator shall record the dates and results of the monitoring required by paragraph (c)(2) of this section following a pressure release including maximum instrument reading measured during the monitoring and the background level measured if the instrument reading is adjusted for background.
- (d) Pressure relief devices routed to a process or fuel gas system or equipped with a closed vent system and control device. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system that captures and transports leakage from the pressure relief device to a control device meeting the requirements of §63.1015 is exempt from the requirements of paragraphs (b) and (c) of this section.
- (e) Rupture disk exemption. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (b) and (c) of this section provided the owner or operator installs a replacement rupture

disk upstream of the pressure relief device as soon as practical after each pressure release, but no later than 5 calendar days after each pressure release, except as provided in §63.1005(d).

#### §63.1012 Compressor standards.

- (a) Compliance schedule. The owner or operator shall comply with this section no later than the compliance dates specified in the referencing subpart.
- (b) Seal system standard. Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in §63.1002(b) and paragraphs (e) and (f) of this section. Each compressor seal system shall meet the requirements specified in paragraphs (b)(1), (b)(2), or (b)(3) of this section.
- (1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure at all times (except during periods of startup, shutdown, or malfunction); or
- (2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that meets the requirements of §63.1015; or
- (3) Equipped with a closed-loop system that purges the barrier fluid directly into a process stream.
- (c) Barrier fluid system. The barrier fluid shall not be in light liquid service. Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. Each sensor shall be observed daily or shall be equipped with an alarm unless the compressor is located within the boundary of an unmanned plant site.
- (d) Failure criterion and leak detection.
  (1) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion, a leak is detected and shall be repaired pursuant to §63.1005, as applicable.
- (2) The owner or operator shall keep records of the design criteria and an explanation of the design criteria; and

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any changes to these criteria and the reasons for the changes.

- (e) Routed to a process or fuel gas system or equipped with a closed vent system and control device. A compressor is exempt from the requirements of paragraphs (b) through (d) of this section if it is equipped with a system to capture and transport leakage from the compressor drive shaft seal to a process or a fuel gas system or to a closed vent system that captures and transports leakage from the compressor to a control device meeting the requirements of §63.1015.
- (f) Alternative compressor standard. (1) Any compressor that is designated as described in §63.1003(e) as operating with no detectable emissions shall operate at all times with an instrument reading of less than 500 parts per million. A compressor so designated is exempt from the requirements of paragraphs (b) through (d) of this section if the compressor is demonstrated initially upon designation, annually, and at other times requested by the Administrator to be operating with an instrument reading of less than 500 parts per million as measured by the method specified in §63.1004(c). A compressor may not be designated or operated having an instrument reading of less than 500 parts per million as described in §63.1003(e) if the compressor has a maximum instrument reading greater than 500 parts per million.
- (2) The owner or operator shall record the dates and results of each compliance test including the background level measured and the maximum instrument reading measured during each compliance test.
- (g) Reciprocating compressor exemption. Any existing reciprocating compressor in a process unit or affected facility that becomes an affected facility under provisions of 40 CFR 60.14 or 60.15 is exempt from paragraphs (b), (c), and (d) of this section provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of the above exempted paragraphs of this section.

[64 FR 34886, June 29, 1999, as amended at 64 FR 63706, Nov. 22, 1999]

## § 63.1013 Sampling connection systems standards.

- (a) Compliance schedule. The owner or operator shall comply with this section no later than the compliance dates specified in the referencing subpart.
- (b) Equipment requirement. Each sampling connection system shall be equipped with a closed purge, closed loop, or closed vent system, except as provided in paragraph (d) of this section. Gases displaced during filling of the sample container are not required to be collected or captured.
- (c) Equipment design and operation. Each closed-purge, closed-loop, or closed vent system except as provided in paragraph (d) of this section shall meet the applicable requirements specified in paragraphs (c)(1) through (c)(5) of this section.
- (1) The system shall return the purged process fluid directly to a process line or fuel gas system meeting the compliance determinations in §63.1015 or §63.1002(b) as appropriate; or
- (2) Collect and recycle the purged process fluid to a process; or
- (3) Be designed and operated to capture and transport all the purged process fluid to a control device that meets the requirements of §63.1015; or
- (4) Collect, store, and transport the purged process fluid to a system or facility identified in paragraph (c)(4)(i), (c)(4)(ii), or (c)(4)(iii) of this section.
- (i) A waste management unit as defined in 40 CFR 63.111 or 40 CFR part 63, subpart G, if the waste management unit is complying with the provisions of 40 CFR part 63, subpart G, applicable to group 1 wastewater streams. If the purged process fluid does not contain any organic HAP listed in table 9 of 40 CFR part 63, subpart G, the waste management unit need not be subject to. and operated in compliance with the requirements of 40 CFR part 63, subpart G, applicable to subject wastewater steams provided the facility has a National Pollution Discharge Elimination System (NPDES) permit or sends the wastewater to an NPDES-permitted facility.
- (ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or